

S137884



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

SWA10A-2-OH
Job Sheet OH187791



Part No: SWA10A-2-OH

Job Qty: 1 ea

Part Name: Electric Swivel 10,000 lb Safe Work Load (4,536 Kg)



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 12/17/18

Job Tracking No: RA500

Due Date: 1/4/19

Created By: Michelle Gagnon-Donovan

Type: Rework - OH

Description: SN: 03-4357-05

Note: DWG SWA10A Rev. 3 IPP Rev. A 18.06.01 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	1/4/19	1/4/19	0.00	0.00	Start Up Small Fab-2		met. 18.12.17
110	Small Fab	1 pcs	1/4/19	1/4/19	0.00	1.00	Small Fab-6		AP
120	QC	1 pcs	1/4/19	1/4/19	0.00	0.00	QC5		8 00 38
125	Customer Acceptance	1 pcs	1/4/19	1/4/19	0.00	0.00	QC6	→ Not required	
130	Outsource	1 pcs	1/4/19	1/4/19			SKY002-VC	5	18-1-07
140	Packaging	1 pcs	1/4/19	1/4/19	0.00	0.00	Packaging2		JAN 14 2019
180	QC	1 pcs	1/4/19	1/4/19	0.00	0.00	QC6		38
190	Small Fab	1 pcs	1/4/19	1/4/19	0.00	1.00	Small Fab-5		AP 3-89
200	QC	1 pcs	1/4/19	1/4/19	0.00	0.00	QC5		21
210	DC	1 pcs	1/4/19	1/4/19	0.00	0.00	DC		21
220	Packaging	1 pcs	1/4/19	1/4/19	0.00	0.00	Packaging3-2		JAN 22 2019
230	QC21-FG	1 Ea	1/4/19	1/4/19	0.00	0.00	QC21		21

Part Op 110 - TEST ASSEMBLY. DISASSEMBLE ASSEMBLY. INSPECT DAMAGE PART.
Descriptions: 120 -

190 - RE-ASSEMBLE. ***All assembly to be done in accordance with manual*** TEST ASSEMBLY.

210 - Photocopy blue file and create labels



Container No: S137884



Part: SWA10A-2

Job No: OH187791

Serial No/Batch: 03-4357-05

Revision: 3

Inspector:

Exp Date:

Instructions:

Date: 01/21/19

1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Flex 12/17/18 10:30 AM Dart.Gagnon.Michelle

7604

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
SWA10A-2-AR	Electric Swivel 10,000 lb Safe Work Load (4,536 Kg)	1 pcs (1 ea)	90-Start up Operation	
188-FPSS-1032-5/8	Set Screw	1 Ea (1 ea)	190-Small Fab	S037083
188-FSCS-1032-5/8	Set Screw	4 Ea (4 ea)	190-Small Fab	S078378
C10-28	Swivel Bushing, C10/SWA10	1 Ea (1 ea)	190-Small Fab	S029202
EL-PLUG-F	3-Prong Female Spade Plug	1 Ea (1 ea)	190-Small Fab	
EL-PLUG-M	3-Prong Male Spade Plug	1 Ea (1 ea)	190-Small Fab	
EL314-SJTOW	Long Line Electrical Wire, 14/3 Gauge	6 ft (6 ea)	190-Small Fab	S047767
SWA10A-100	Lower End	1 Ea (1 ea)	190-Small Fab	
SWA10A-1100	Upper DU Bearing	1 Ea (1 ea)	190-Small Fab	S116380
SWA10A-1200	Lower DU Bearing	1 Ea (1 ea)	190-Small Fab	S053845
SWA10A-1300	Roller Thrust Bearing	1 Ea (1 ea)	190-Small Fab	S066607
SWA10A-1400	Circlip	1 Ea (1 ea)	190-Small Fab	S060997
SWA10A-1800	Cover	1 Ea (1 ea)	190-Small Fab	
* SWA10A-200	Upper End Swivel	1 Ea (1 ea)	190-Small Fab	S094924
* SWA10A-300	Bearing Housing	1 Ea (1 ea)	190-Small Fab	S098673
SWA10A-400	Thrust Washer	1 Ea (1 ea)	190-Small Fab	S115828
SWA10A-500	Semi-Rings	1 Ea (1 ea)	190-Small Fab	
* SWA10A-600	Collar	1 Ea (1 ea)	190-Small Fab	S101406
* SWA10A-700	Wire Clamp	2 Ea (2 ea)	190-Small Fab	S107557017557
SWA6A-1900	1/4" Female Spade Connector	4 Ea (4 ea)	190-Small Fab	S097738
SWA6A-800A	Connector Bushing	1 Ea (1 ea)	190-Small Fab	
SWA6A-900A	Rotary Connector - 2 wire	1 pcs (1 ea)	190-Small Fab	

7856 K75 SARIK TUBE

6"

S134207

GREASE AEROSOL JOIF (M138724)
 SILICONE GE (M138994)
 LOCTITE 242 (M138766)

* XTRA PARTS TO BE CHARGE TO CLIENT:

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	SWA10A-2	1	1	1

Allocated Container Detail

	Qty	Container No	Location	Init
	1	S137802	conditional release	_____
190-Small Fab		188-FPSS-1032-5/8	1	186
		188-FSCS-1032-5/8	4	170
		C10-28	1	40
		EL-PLUG-F	1	33
		EL-PLUG-M	1	51
		EL314-SJTOW	6	320
		SWA10A-100	1	8
		SWA10A-1100	1	12
		SWA10A-1200	1	27
		SWA10A-1300	1	15
		SWA10A-1400	1	22
		SWA10A-1800	1	12
		SWA10A-200	1	16
		SWA10A-300	1	9
		SWA10A-400	1	10
		SWA10A-500	1	25
		SWA10A-600	1	16
		SWA10A-700A	2	28
		SWA6A-1900	4	401
		SWA6A-800A	1	13
		SWA6A-900A	1	11

Part Specifications

Specifications could not be found.

Plex 12/17/18 10:30 AM Dart.Gagnon.Michelle

Inspection Sheet Complete RA500

Customer QA Ref #

0

Part Number	Batch / Serial #	Quantity	Part Complete	Rev/CHG Current	New Paperwork	New Labels	Disposition	Work order #	Work order instructions
C10	03-15210-05	1	☒ Yes	☐ Yes	☐ Yes	☐ Yes	CUSTOMER SUPPLIED	S133963	Overhaul
SWA10A-2	03-4357-05	1	☒ Yes	☐ Yes	☐ Yes	☐ Yes	CUSTOMER SUPPLIED	S137802	Overhaul
0		0	☐ Yes	☐ Yes	☐ Yes	☐ Yes			
0		0	☐ Yes	☐ Yes	☐ Yes	☐ Yes			
0		0	☐ Yes	☐ Yes	☐ Yes	☐ Yes			
0		0	☐ Yes	☐ Yes	☐ Yes	☐ Yes			

QC Approval: _____ 0

Date: 0-Jan-00 _____



Overhaul Incoming Inspection
SWIVEL SWA-10A-Z

Customer

RA500 / OH 187791

Date

2018/12/19

Part Number

Serial Number

03-4357-05

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(1) SWA10A-300 BEARING HOUSING

☐

(1) SWA10A-200 UPPER END

☐

(2) SWA-10A700A WIRE CLAMP

☐☐☐☐☐☐☐☐☐

* UNABLE TO UNSCREW BEARING HOUSING AND
UPPER END, THREADS ISSUE. WILL NEED MACHINING
TO SEPARATE UNITS.
Inspected By ALAIN PATRY

Work Order OH187791Customer RA 500Number of Wires 2Date 2018-12-18Serial Number 03-4357-05

Number of Cycles	Load (Lbs.)	Action	Pass/Fail
1	10,000	Check for Conductivity against all wires.	Pass
1	10,000	Check all wires for grounding against swivel body.	Pass
1	5,000	Check for Conductivity against all wires.	Pass
1	5,000	Check all wires for grounding against swivel body.	Pass
1	2,500	Check for Conductivity against all wires.	Pass
1	2,500	Check all wires for grounding against swivel body.	Pass
1	0	Check for Conductivity against all wires.	Pass
1	0	Check all wires for grounding against swivel body.	Pass

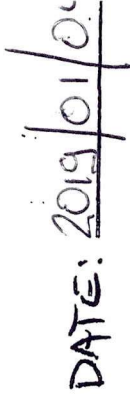
Test Conducted By: Michel Lalonde

Technician

Signature: _____

QC 5 Small FAB / QA

Submit



HAN

S/N : 03-4357-05

16778140 : 907

RA. # 500

[illegible]



Overhaul Incoming Inspection
SWIVEL SWA10A-2

Customer

OH187791 / RA500

Date

2019/01/07

Part Number

Serial Number

03-4357-05

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(1) X SWA10A-600 COLLAR

☐☐☐☐☐☐☐☐☐☐

Inspected By

ALAN PATRY



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO042176



Supplier: SKY002-VC
Skysservice
6120 Midfield Road
Mississauga
ON
L5P 1B1 Canada
Phone: 905-678-5636
Fax: 905-678-5841

PO No: PO042176
PO Date: 1/7/19
Due Date: 1/14/19
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
①	OH187787	C10-OH	C-Series Remote Hook 10,000 lbs Lift Capacity	Firmed	-	1/14/19	1 pcs	0 pcs	1 pcs	\$106.00/pcs	\$106.00
②	OH187791	SWA10A- 2-OH	Electric Swivel 10,000 lb Safe Work Load (4,536 Kg)	Firmed	-	1/14/19	1 pcs	0 pcs	1 pcs	\$106.00/pcs	\$106.00
③	185530	D3011-1B	Rappel Slide Bar : Various STCs 1- LPI AS PER ASTM 1417 LEVEL 2 AS PER DWG D3011 2- Certificate of conformity is required	Firmed	-	1/14/19	4 pcs	0 pcs	4 pcs	\$106.00/pcs	\$424.00
Grand Total:											\$636.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.



skyservice Work Order Traveler

Sky Service F.B.O. Inc.

10105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO38823	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: PO042176 ✓
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT ON:

✓ 1 C-SERIES REMOTE HOOK , P/N# C10-OH , J/S# OH187787 ✓

✓ 1 ELECTRIC SWIVEL , P/N SWA10A-2-OH , J/S# OH187791 ✓

✓ 4 RAPPEL SIDE BAR , P/N# D3011-1B , J/S# 185530 ✓

Action Taken:						Date:	Initial/Stamp:
LPI/MPI INSPECTION CARRIED OUT AS PER ASTM E-1417M-16 & ASTM E-1444M-16 ***NO CRACK FOUND***						JAN 10 2019	 m
PEN ZL-37, MPO13139, CLEANER SKC-S MPO15030, EMU.(ZR-10B, MPO15896), DEV. MPO15030, UV LIGHT M-20142. MAGBENCH S/N 208123 CAL DUE: 05-APR-2019 POWDER 14A BATCH# MPO13600 CARRIER II BATCH# MPO13923 BLACK LIGHT-M20186							
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	

DAS
38
9-89

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	ACA/SCA Stamp 	Date: JAN 10 2019
Name: RAFIK MELIKIAN		



Electric Swivel
SWA10A

Work Order OH 187791

Customer RA-500

Number of Wires 2

Date 2019-1-18

Serial Number 03-4357-05

Number of Cycles	Load (Lbs.)	Action	Pass/Fail
1	10,000	Check for Conductivity against all wires.	Pass
1	10,000	Check all wires for grounding against swivel body.	Pass
1	5,000	Check for Conductivity against all wires.	Pass
1	5,000	Check all wires for grounding against swivel body.	Pass
1	2,500	Check for Conductivity against all wires.	Pass
1	2,500	Check all wires for grounding against swivel body.	Pass
1	0	Check for Conductivity against all wires.	Pass
1	0	Check all wires for grounding against swivel body.	Pass

Test Conducted By: Michel Lalonde

Technician

Submit

Signature: Sylvie Pouchet
QC 5 Small FAB / QA

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: <u>04187791</u> Part No. <u>SWA### Swivels</u> NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☒ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																									
Date: <u>2019/01/18</u>	Step #:	QTY Effective :		MRB (QSI042) Approval Feb 01, 2018																																																							
Description Work Order Deviation - Use a combination of heatshrink tubing and RTV Silicone to create a watertight seal around all electrical connections. - Use a D2728-1 Placard in place of the laser engraved Dart logo		Disposition These deviations are acceptable to carry out on the following swivels: - SWA3 - SWA6A - SWA10A - SWA15A - SWA25A - PSWA25A There is no impact on fit, form or function.		Completed By <u>ALAN PATRY</u> Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																							
Root Cause <table style="width:100%; border-collapse: collapse;"> <tr><td style="width:50%;">Environment ☐</td><td style="width:50%;">No Re-verification ☐</td></tr> <tr><td>Design ☒</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>☒ Product Improvement</td></tr> <tr><td>Substation ☐</td><td>☒ Process Improvement</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>		Environment ☐	No Re-verification ☐	Design ☒	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	☒ Product Improvement	Substation ☐	☒ Process Improvement	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%; border-collapse: collapse;"> <tr><td style="width:33%;">Pressure/Forced ☐</td><td style="width:33%;">Temperature/Cure ☐</td><td style="width:33%;">Power Loss/Surge ☐</td></tr> <tr><td>Bending ☐</td><td>Set-up ☐</td><td>Folio/Program ☐</td></tr> <tr><td>Centre Not Concentric ☐</td><td>BOM/Route ☐</td><td>Grain ☐</td></tr> <tr><td>Cracks ☐</td><td>Broken/Damage/Defect ☐</td><td>Weld ☐</td></tr> <tr><td>Crimp/Kink/Ripple/Wave ☐</td><td>Inspection Incomplete/Unqualified ☐</td><td>Wrong Stock Pulled ☐</td></tr> <tr><td>Cuffs ☐</td><td>Contamination ☐</td><td>Out of Sequence ☐</td></tr> <tr><td>Crushing ☐</td><td>Countersink ☐</td><td>Off-set ☐</td></tr> <tr><td>Heat Treat ☐</td><td>Cut Too Short ☐</td><td>Mislabeled ☐</td></tr> <tr><td>Wave/Twist in Tube ☐</td><td>Instructions Incomplete/Unclear ☐</td><td>Fit/Function ☐</td></tr> <tr><td>Marks/Chatter ☐</td><td>Drill Holes ☐</td><td>Misaligned/off center ☐</td></tr> </table>				Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Crushing ☐	Countersink ☐	Off-set ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐
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